

a land-area since the close of the Paleozoic era. Speaking of those ancient species which are restricted to the Ozark Plateau and to the adjacent area to the west and southwest, Steyermark, p. 231, states, "In some instances species originating in this area are represented slightly to the east or southeast of the main area, but have spread mostly westward and southwestward; some of this class are found as far south as the Mexican plateau or as far west as Arizona." Comparing this class with that comprising the species common to the southern Appalachians, Steyermark, p. 233, concludes that it is "a younger flora, characteristic of the uplands and barrens of the Ozarks, a flora which probably originated in Tertiary times when this region was re-elevated in late Tertiary."

Though Steyermark places the time of establishment of this class of species in the Ozark area as late Tertiary, it seems to me that, in view of the general disruption in range of *L. tripetala* and its extreme isolation in Oklahoma, it and perhaps other species mentioned by Steyermark as occurring on both the Ozark and the Mexican plateaus may well have attained their present limits of distribution in earlier Tertiary times.

(To be continued)

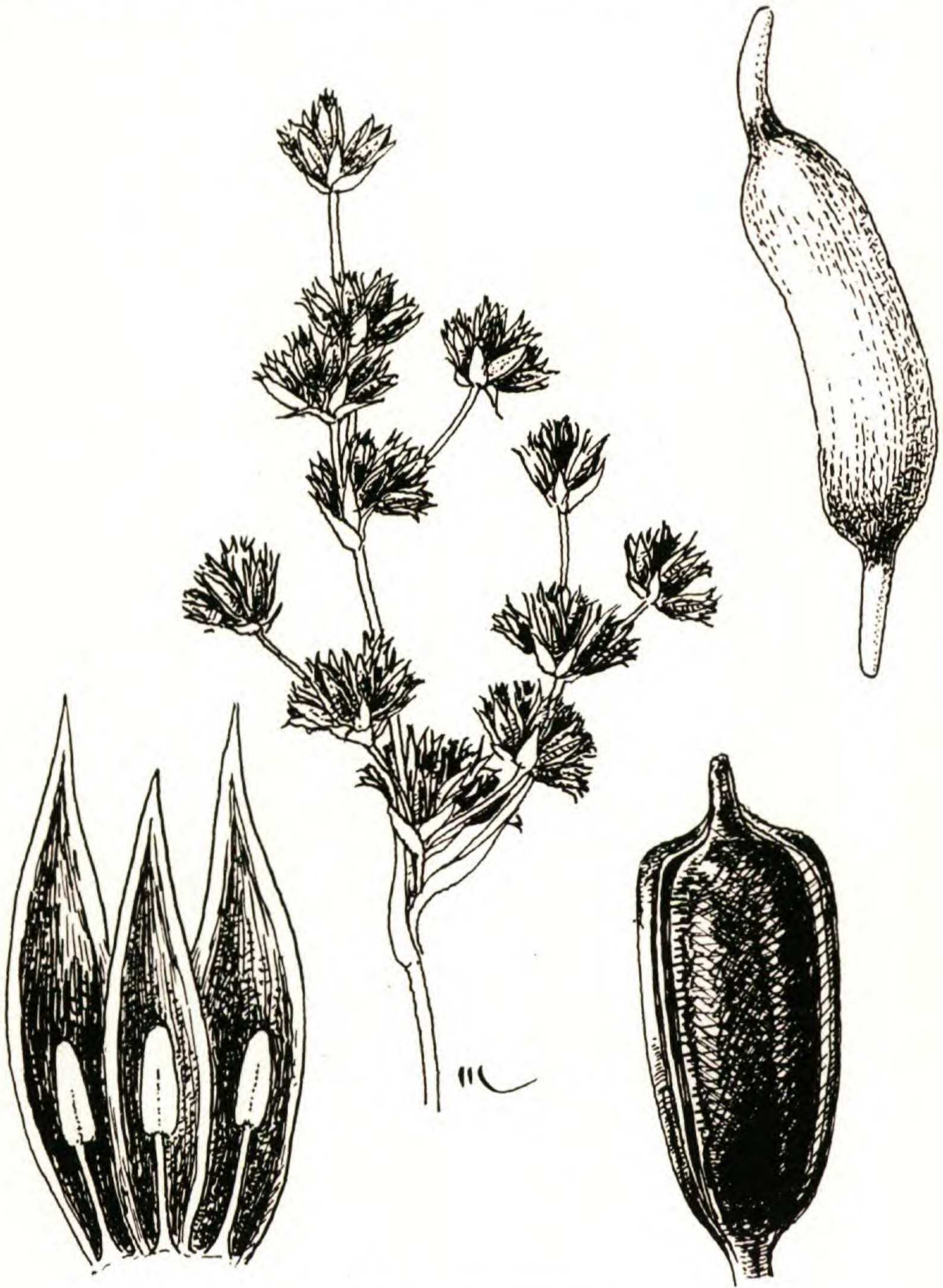
A NEW *JUNCUS* FROM UTAH

ROBERT F. MARTIN

JUNCUS utahensis, sp. nov. Perennis; caules ex rhizomate horizontale, 25–35 cm. alti; folia septata, compressa; inflorescentia 15–30-glomerulata; glomeruli 4–7-flores; sepala 4 mm. longa, lanceolata, subacuminata, saturate brunnea, petalis paulo longiora; petala lanceolata, acuta, saturate brunnea; stamina 6, sepalis duplo breviora; filamentum antheraque subaequalia; fructus saturate brunneus, mucronatus, obtusus, sepalis aequalis; semina caudata.

Perennial; stems arising singly or few together from a horizontal rootstock, 25–35 cm. high; sheaths with scarious margins; blades up to 18 cm. long, compressed, septate; inflorescence rather congested, of 15–30 clusters of 4–7 flowers; bracts and bracteoles light brown; sepals 4 mm. long, lanceolate, short-acuminate, chocolate-brown, a little longer than the lanceolate, similarly colored acute petals; stamens 6, about one-half the length of the sepals; filament and anther about the same length, the filament narrower; capsule oblong, blunt below the mucronation, chocolate-brown, about the length of the sepals; seeds white-tailed, light reddish-brown, striate, 0.8 mm. long.

TYPE in the U. S. National Herbarium, no. 1684014 collected by *A. G. Nord and E. Fred Sargent* (no. 1), September 10, 1927, in a



JUNCUS UTAHENSIS.

meadow at 8,700 feet, Ashley National Forest, Summit County, UTAH. Also represented in the Herbarium of the Forest Service by *Hutchings* no. 204 from the same county.

Juncus utahensis resembles species of the *Ensifolii* group.

Distinction is made as follows:

Stamens 3.....	<i>J. ensifolius</i> Wiks.
Stamens 6	
Seeds white-tailed.....	<i>J. utahensis</i> Martin
Seeds only apiculate.....	<i>J. xiphioides</i> Meyer
	<i>J. brunneocens</i> Rydb.
	<i>J. saximontanus</i> A. Nels.

Juncus utahensis may be distinguished from *J. nevadensis* S. Wats. by the acute capsule and subterete leaf-blades of the latter species.

Mr. B. Y. Morrison, of the Bureau of Plant Industry, has kindly executed the accompanying illustration.

BUREAU OF PLANT INDUSTRY, WASHINGTON

TWO UNDESCRIBED PLANTS FROM ARKANSAS

JULIAN A. STEYERMARK

ECHINACEA PURPUREA (L.) Moench, var. **arkansana** var. nov., foliis caulinis 3.5–6 cm. longis, 1–1.5 cm. latis, caulibus tenuibus; capitulis 1–1.2 cm. altis, 1.2–1.5 cm. latis; paleis apicibus longis spinosis terminatis, 10–11 mm. longis; ligulis 2.5–3 cm. longis; acheniis 3.5 mm. longis.—Boggy Springs, Sevier Co., ARKANSAS, July 19, 1937, *Brinkley 259* (TYPE in herbarium of Field Museum).

This variety is smaller in all respects than typical *Echinacea purpurea*. The contrasting set of differences may best be noted in the following table:

ECHINACEA PURPUREA	ECHINACEA PURPUREA VAR. ARKANSANA
cauline 7–19 cm. long	3.5–6 cm. long
leaves 1.5–7 cm. broad	1–1.5 cm. broad
heads 1.5–2.7 cm. high	1–1.2 cm. high
1.1–4 cm. broad	1.2–1.5 cm. broad
rays 4–5.5 cm. long	2.5–3 cm. long
paleas 11–13 mm. long	10–11 mm. long
achenes 4–4.5 mm. long	3.5 mm. long
stems stout	slender

CLEMATIS VERSICOLOR Small, f. **pubescens** f. nov., foliis infra dense puberulis.—Boggy Springs, Sevier Co., ARKANSAS, July 24, 1937, *Brinkley 268* (TYPE in herbarium of Field Museum).

Typical *Clematis versicolor* of southern Missouri and northern Arkansas has perfectly glabrous leaves. In the plant from Sevier Co.